THE LEAD-ACID BATTERY FACTORY HARM TO THE SURROUNDING ENVIRONMENT AND POPULATION HEALTH

Libo Pan, *Department of Environmental Pollution and Health,Chinese Research Academy of Environmental Sciences (CRAES), Ministry of Environment Protection, Beijing 100012, China*

Jinliang Zhang, *Department of Environmental Pollution and Health,Chinese Research Academy of Environmental Sciences (CRAES), Ministry of Environment Protection, Beijing 100012, China*

Xiuge Zhao, *Department of Environmental Pollution and Health,Chinese Research Academy of Environmental Sciences (CRAES), Ministry of Environment Protection, Beijing 100012, China*

Ling Liu, *Department of Environmental Pollution and Health,Chinese Research Academy of Environmental Sciences (CRAES), Ministry of Environment Protection, Beijing 100012, China*

Background and Aims: To explore the effects of lead-acid battery factory on surrounding air, water and soil, as well as the impacts to population health neighboring, in order to provide scientific evidences to the strategy of protection and governance.

Methods Literatures in the almost two decades concerning occupational lead contact, lead harm and lead poisoning level in battery manufacturers are analyzed and summarized to investigate the harm status.

Results Lead concentration in air, water and soil exceeds the allowed limit more slightly than before since 1998, and lead accumulation in the body of occupational population and children were higher than the resident around. According to the references, Children's BBL exceeded the allowed level above 70%, and the lead burden of occupational population arranged from 4.8% to 66.7%.

Conclusion The harm of occupational lead contact in our country is relatively serious, so the supervision should be strengthened to ensure the health of workers, staffs and all people involved.